

# MATERIAL SAFETY DATA SHEET

RAIN-X® ANTI-FOG™

## 1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Number: 15523

Version Date: 09/06/02

**Product Name:** RAIN-X® ANTI-FOG™

**Product Use:** Interior glass antifog treatment

**Synonyms:** AF21101-24, AF21106, AF21201-24, AF21206, AF21212, AF21296, AF21412, AF21112, AF21212CN, BCAF21112, BCAF21212CN

### Company Information

SOPUS Products  
P.O. Box 4427  
Houston, TX 77210-4427  
USA

### Phone Numbers

**Medical Emergency:** 1-800-546-6040  
**Transportation Emergency (USA):** 1-800-424-9300  
**Transportation Emergency (International):**  
1-703-527-3887 (Call collect)  
**MSDS Assistance:** 1-800-546-6227  
**Fax On Demand:** 1-800-546-6227  
**Technical Assistance:** 1-800-416-1600  
**Customer Service:** 1-800-416-1600  
**Fax Number:** 713-217-3181  
**Internet Address:** www.MSDS.PZLQS.com

## 2. COMPONENT INFORMATION

Component	CAS No.	Weight Percent Range	Hazardous in Blend
ETHYL ALCOHOL	64-17-5	70 - 99	Yes
ISOPROPYL ALCOHOL	67-63-0	0 - 15	Yes
SURFACTANTS	MIXTURE	1 - 5	No

This product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Hazards:

**Flammable/Combustible**  X  **Acute Toxin**  X  **Chronic Toxin**  -  **Carcinogen**  -   
**Pressure**  -  **Reactive**  -  **Exposure Limit**  X  **Target Organ**  -  **Other**  -

**Other:** No information available

## 3. HAZARDS IDENTIFICATION

### Emergency and Hazards Overview

CAUTION: FLAMMABLE. EYE IRRITANT.

**NFPA Ratings:** Health  1  Flammability  3  Reactivity  0

**Primary Route of Exposure:** Skin  X  Inhalation  -  Eye  -

### Health Effect Information

**Eye Contact:** Avoid eye contact. This product is moderately to severely irritating to the eyes upon direct contact. Based on testing of similar products and/or components. Exposure to high concentrations of vapors may be irritating to the eyes. These effects are transient, and complete recovery follows.

**Skin Contact:** Single, short exposures, as expected with consumer use of this product, are expected to be practically non-irritating to the skin. Prolonged or repeated skin contact may result in dryness, chapping, and reddening. May be absorbed through skin.

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**Inhalation:** This product is not expected to pose an inhalation hazard under conditions of foreseeable use. This product may be considered a low health hazard unless inhaled in very high concentrations. Exposure to vapors generated under unusual conditions may be mildly irritating to the nose and throat. Acute and chronic overexposures may be irritating to the respiratory tract.

**Ingestion:** Do not ingest. Can cause central nervous system (CNS) depression if ingested. Ingestion is expected to be relatively non-toxic unless aspiration occurs. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. Intentional misuse by deliberately ingesting can be harmful.

**Medical Conditions Aggravated by Exposure:** Drying and chapping may make the skin more susceptible to other irritants, sensitizers and disease.

**Other:** No information available

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## 4. FIRST AID INFORMATION

**Eye Contact:** Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists, seek medical attention.

**Skin Contact:** No treatment is necessary under ordinary circumstances. Wash thoroughly with water. If redness or irritation occurs and persists, seek medical attention. Use a hand or skin lotion to prevent dryness.

**Inhalation:** No treatment is necessary under ordinary circumstances. If victim exhibits signs of vapor intoxication remove to fresh air. If discomfort persists seek medical attention.

**Ingestion:** Do not induce vomiting due to aspiration hazard. If vomiting occurs lower head below knees to avoid aspiration. If victim exhibits signs of lung aspiration such as coughing or choking, seek immediate medical assistance.

**Notes to Physician:** No information available

**Other:** No information available

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## 5. FIRE AND EXPLOSION INFORMATION

### Flammable Properties

**Flash Point:** 65 F, 18.3 C

**Test Method:** T.O.C.

### Flammable Limits in Air

**Upper Percent:** 12.7%

**Lower Percent:** 2%

**Autoignition Temperature:** No data available

**Test Method:** No information available

**NFPA Classification:** No information available

**Extinguishing Media:** Use water spray (fog), dry chemical, foam, or carbon dioxide.

### Fire Fighting Measures

**Special Fire Fighting Procedures and Equipment:** No special fire fighting procedures are required.

Water may be ineffective but can be used to cool containers exposed to heat or flame to prevent vapor pressure buildup and possible container rupture.

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**Unusual Fire and Explosion Conditions:** Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

**Hazardous Combustion By-Products:** No information available

**Other:** No information available

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## 6. ACCIDENTAL RELEASE MEASURES

**Personnel Safeguards:** Remove all sources of ignition. Provide adequate ventilation during clean-up. Consult Health Effect Information in Section 3, Personal Protection Information in Section 8, Fire and Explosion Information in Section 5, and Stability and Reactivity Information in Section 10.

**Regulatory Notifications:** No notification required

**Containment and Clean up:** No special cleanup procedures are necessary. Flush area with water to dilute. Small spills may be picked up with absorbent material.

**Other:** No information available

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## 7. HANDLING AND STORAGE INFORMATION

**Handling:** All ignition sources in the area should be controlled. Do not open or use in unventilated, enclosed or confined spaces.

**Storage:** Store in a cool, well ventilated area in closed containers away from heat, sparks, open flame or oxidizing materials. Do not store at temperatures greater than 120 F. Do not transfer to unmarked containers.

### Empty Container Warnings

**Drums:** Not applicable

**Plastic:** Do not reuse this container. Empty container may retain product residues.

**Other:** No information available

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

### Exposure Limits and Guidelines

Component	CAS No.	Exposure Limit
ETHYL ALCOHOL	64-17-5	OSHA - PEL: TWA 1000 ppm ACGIH - TLV: TWA 1000 ppm
ISOPROPYL ALCOHOL	67-63-0	OSHA - PEL: TWA 400 ppm ACGIH - TLV: TWA 400 ppm ACGIH - TLV: STEL 500 ppm

### Personal Protective Equipment

**Eye/Face Protection:** Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.

**Skin Protection:** Skin protection is not required under conditions of normal use. Launder soiled clothes.

**Respiratory Protection:** Respiratory protection is not required under conditions of normal use. If excessive levels of mists or vapors are generated while using this product, use an organic vapor respirator.

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**Personal Hygiene:** Consumption of food and beverage should be avoided in work areas where this product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

## Engineering Controls / Work Practices

**Ventilation:** General room ventilation is normally sufficient to prevent buildup of hazardous concentrations. If product is used in enclosed or confined spaces, adequate ventilation must be provided to prevent buildup of vapors or mists.

**Other:** No information available

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b> Colorless	
<b>Odor:</b> Alcohol	<b>Vapor Pressure:</b> 33 mm Hg @ 77 F
<b>Physical state:</b> Liquid	<b>Vapor Density (air=1):</b> > 1
<b>pH:</b> No data available	<b>Percent Volatile by Volume:</b> 98
<b>Boiling Point:</b> 180 F, 82.2 C	<b>Volatile Organic Content:</b> No data available
<b>Melting Point:</b> No data available	<b>Molecular Weight:</b> No data available
<b>Specific Gravity:</b> 0.79	<b>Average Carbon Number:</b> No data available
<b>Pour Point:</b> No data available	<b>Viscosity @ 100 F:</b> No data available
	<b>Viscosity @ 40 C:</b> No data available
<b>Solubility in Water:</b> Soluble in water	
<b>Octanol / Water Coefficient: Log K<sub>ow</sub> =</b> No data available	

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## 10. STABILITY AND REACTIVITY INFORMATION

**Chemical Stability:** Stable

**Conditions to Avoid:** Keep away from heat, sparks, open flames and other ignition sources.

**Incompatible Materials to Avoid:** May react with strong oxidizing agents. Aldehydes, halogens and concentrated mineral acids. Strong bases.

**Other:** No information available

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## 11. TOXICOLOGICAL INFORMATION

**Primary Eye Irritation:** No information available

**Primary Skin Irritation:** No information available

**Acute Dermal Toxicity:** No information available

**Subacute Dermal Toxicity:** No information available

**Dermal Sensitization:** No information available

**Inhalation Toxicity:** No information available

**Inhalation Sensitization:** No information available

**Oral Toxicity:** No information available

**Mutagenicity:** No information available

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**Carcinogenicity:** No information available

**Reproductive and Developmental Toxicity:** No information available

**Teratogenicity:** No information available

**Immunotoxicity:** No information available

**Neurotoxicity:** No information available

**Other:** No information available

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## 12. ECOLOGICAL INFORMATION

**Aquatic Toxicity:** No information available

**Terrestrial Toxicity:** No information available

**Chemical Fate and Transport:** No information available

**Other:** No information available

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## 13. DISPOSAL INFORMATION

**Regulatory Information:** Dispose of residual products and empty containers responsibly.

**Waste Disposal Methods:** Waste material may be landfilled or incinerated at an approved facility.

**Other:** No information available

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## 14. TRANSPORTATION INFORMATION

**U.S. Department of Transportation (DOT)**

**Highway / Rail (Bulk):** NOT APPLICABLE

**Highway / Rail (Non-Bulk):** CONSUMER COMMODITY, ORM-D

**For US shipments, US DOT law requires the shipper to determine the proper shipping description of the material that is being shipped. The shipping information and description contained in this section may not be suitable for all shipments of this material, but may help the shipper determine the proper shipping description for a particular shipment.**

**International Information**

**Vessel: IMDG Regulated:**   X   **IMDG Not Regulated:**   -  

**Air: ICAO Regulated:**   X   **ICAO Not Regulated:**   -  

**Other:** No information available

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## 15. Regulatory Information

**Regulatory Lists Searched:** The components listed in Section 2 of this MSDS were compared to substances that appear on the following regulatory lists. Each list is numerically identified. See Regulatory Search Results below.

**Health & Safety:** 10 - IARC carcinogen, 11 - NTP carcinogen, 12 - OSHA carcinogen, 15 - ACGIH TLV, 16 - OSHA PEL, 17 - NIOSH exposure limit, 20 - US DOT Appendix A, Hazardous substances, 22 - FDA 21 CFR Total food additives, 23 - NFPA 49 or 325

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**Environmental:** 30 - CAA 1990 Hazardous air pollutants, 31 - CAA Ozone depletors, 33 - CAA HON rule, 34 - CAA Toxic substance for accidental release prevention, 35 - CAA Volatile organic compounds (VOC's) in SOCM, 41 - CERCLA / SARA Section 302 extremely hazardous substances, 42 - CERCLA / SARA Section 313 emissions reporting, 43 - CWA Hazardous substances, 44 - CWA Priority pollutants, 45 - CWA Toxic pollutants, 46 - EPA Proposed test rule for hazardous air pollutants, 47 - RCRA Basis for listing - Appendix VII, 48 - RCRA waste, 49 - SDWA - (S)MCLs

**International:** 50 - Canada - WHMIS Classification of substance, 54 - Mexico - Drinking water - ecological criteria, 55 - Mexico - Wastewater discharges, 56 - US -TSCA Section (12)(b) - export notification

**State Lists:** 60 - CA - Proposition 65, 61 - FL - Substances, 62 - MI - Critical materials, 63 - MA - RTK, 64 - MA - Extraordinarily hazardous substances, 65 - MN - Hazardous substances, 66 - PA - RTK, 67 - NJ - RTK, 68 - NJ - Environmental hazardous substances, 69 - NJ - Special hazardous substances

**Inventories:** 80 - Canada - Domestic substances , 81 - European - EINECS, 82 - Japan - ENCS, 83 - Korea - Existing and evaluated chemical substances, 84 - US - TSCA , 85 - China Inventory

### **Regulatory Search Results:**

ETHYL ALCOHOL: 15, 16, 17, 22, 23, 35, 50, 61, 63, 65, 66, 67, 69, 80, 81, 82, 83, 84, 85

ISOPROPYL ALCOHOL: 15, 16, 17, 22, 23, 35, 42, 50, 61, 63, 65, 66, 67, 68, 69, 80, 81, 82, 83, 84, 85

**U.S. TSCA Inventory:** All components of this material are on the US TSCA Inventory.

**SARA Section 313:** Consumer products are not regulated under SARA, Title III, Section 313.

**IARC:** No information available

### **SARA 311 / 312 Categories**

**Acute:**   X   **Chronic:**   --   **Fire:**   X   **Pressure:**   --   **Reactive:**   --  

**Not Regulated:**   --  

### **Canadian WHMIS Classification**

Class B - Flammable and Combustible Material, Division 2, Flammable Liquids

Class D - Poisonous and infectious material, Division 2B, Toxic Material

### **European Union Classification**

#### **Hazard Symbols:**

Highly flammable / F / flame in square.

Irritant / Xi / X in square.

#### **Risk Phrases:**

R11: Highly flammable.

R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness.

#### **Safety Phrases:**

S16: Keep away from sources of ignition - No smoking.

S2: Keep out of the reach of Children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S7: Keep container tightly closed.

S25: Avoid contact with eyes.

S46: If swallowed, seek medical advice immediately and show this container or label.

**Other:** No information available

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## 16. OTHER INFORMATION

### Health and Environmental Label Language

Front Label:

WARNING: FLAMMABLE. EYE IRRITANT.

Read carefully other cautions on back.

Back Label:

WARNING: Contains denatured alcohol.

PRECAUTIONARY MEASURES: Keep away from heat, sparks, flames and other ignition sources. Store below 120F. Avoid contact with eyes. FIRST AID: For contact with eyes, wash thoroughly with water and see physician if irritation persists.

Use only as directed. Intentional misuse by deliberately ingesting can be harmful.

KEEP OUT OF REACH OF CHILDREN.

### MSDS Revisions

**Previous Version Date:** 09/06/02

### Previous Version Information

Section 14 - Transportation Information Revised.

### Other

No information available

### Prepared By:

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